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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/081,133	02/22/2002	Juhani Peuramaki	72989	8534
22242 7590 . 09/20/2005			EXAMINER	
FITCH EVEN	I TABIN AND FLAI	JACKSON, MONIQUE R		
120 SOUTH L	A SALLE STREET			
SUITE 1600			ART UNIT	PAPER NUMBER
CHICAGO, IL 60603-3406			1773	

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

-	Application No.	Applicant(s)				
Office Assism Comments	10/081,133	PEURAMAKI, JUHANI				
Office Action Summary	Examiner	Art Unit				
	Monique R. Jackson	1773				
The MAILING DATE of this communication a Period for Reply	appears on the cover sheet wit	h the correspondence address				
A SHORTENED STATUTORY PERIOD FOR REI WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication If NO period for reply is specified above, the maximum statutory peri - Failure to reply within the set or extended period for reply will, by sta Any reply received by the Office later than three months after the may earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNIC 1.136(a). In no event, however, may a re fod will apply and will expire SIX (6) MONT tute, cause the application to become ABA	CATION.  sply be timely filed  IHS from the mailing date of this communication.  ANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 08	3 July 2005.	•				
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ T	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
3) Since this application is in condition for allow	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice unde	er <i>Ex parte Quayle</i> , 1935 C.D.	11, 453 O.G. 213.				
Disposition of Claims						
4) Claim(s) 25,27-29 and 48-60 is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
-	6) Claim(s) <u>25,27-29 and 48-60</u> is/are rejected.					
7) Claim(s) is/are objected to.	d/or algation varyingment					
8) Claim(s) are subject to restriction and	a/or election requirement.					
Application Papers						
9)☐ The specification is objected to by the Exam	iner.					
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to t						
Replacement drawing sheet(s) including the corr	,					
11) ☐ The oath or declaration is objected to by the	Examiner. Note the attached	Office Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for forei a)□ All b)□ Some * c)⊠ None of:		119(a)-(d) or (f).				
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
		,				
Attachment(s)						
1) Notice of References Cited (PTO-892)		ummary (PTO-413)				
<ol> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/I</li> </ol>		/Mail Date formal Patent Application (PTO-152)				
Paper No(s)/Mail Date	6) Other:	-·				

Application/Control Number: 10/081,133 Page 2

Art Unit: 1773

## **DETAILED ACTION**

- 1. Applicant's election of claims 21, 25 and 27-29 in the reply filed on 7/8/05 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
- 2. The amendment filed 7/8/05 has been entered. Claims 12, 13, 20, 21 and 30-47 have been canceled. New claims 48-60 have been added. Claims 25, 27-29 and 48-60 are pending in the application.
- 3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

## Claim Rejections - 35 USC § 103

4. Claims 52-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baitinger et al (USPN 4,645,710.) Baitinger et al teach foam laminate structures comprising a foamed polyurethane core with a facer material uniformly adhered thereto with an adhesive material wherein the facer material may be aluminum foil and the adhesive material may be polyamides such as nylon which is extrusion coated onto the aluminum foil; and wherein the composite may be formed by contacting a formed foam core to the adhesive coated-facer material at temperatures in the range of about 100 to 300C to form the laminate comprising polyurethane foam/polyamide adhesive/aluminum (Abstract; Col. 1, line 56-Col. 2, line 29.) Though Baitinger et al teach that the adhesive may be nylon, Baitinger et al do not specifically teach that the nylon is polyamide 6 or polyamide 66 as instantly claimed however, nylon/polyamide 66 or polyamide/nylon 6 are obvious species of polyamide or nylon utilized in the art and would have

been obvious to one having ordinary skill in the art at the time of the invention, wherein upon heating to produce the composite as taught by Baitinger et al, the extruded polyamide 6 or polyamide 66, being a semi-crystalline material, would crystalline as instantly claimed.

Claims 25, 27-29 and 52-60 are rejected under 35 U.S.C. 103(a) as being unpatentable 5. over Clayton et al (USPN 6,044,604.) Clayton et al teaches a composite member comprising a gypsum board (14), a foam core (11) of polyisocyanurate or polyurethane, a facer (15) applied to one major surface of the foam core wherein the facer includes polymer materials, cellulose materials, aluminum foil or trilaminates thereof, wherein a suitable polymer facer material is preferably polyamide 6,6, and wherein the composite is produced by feeding a gypsum board into a laminator assembly, depositing a foamable polymer liquid on the gypsum board, feeding a facer material into the laminator assembly above the foamable liquid, allowing the liquid to rise between the gypsum board and the facer material forming a polymer foam of a pre-determined thickness, and curing the polymer foam under heat to create the composite, wherein a skin layer is formed on the surface of the foam adhered to the facer material (Abstract; Col. 5, lines 50-53; Col. 6, line 59-Col. 7, line 10.) Though Clayton et al teach that a trilaminate of facer materials may be utilized wherein suitable facer materials include aluminum foil and polyamide, particularly polyamide 6,6, which when heated upon curing of the foam would crystallize as instantly claimed, Clayton et al do not specifically teach that the facer laminate comprises a polyamide layer adhered to an aluminum foil with the polyamide adjacent the foam. However, given the teachings of Clayton et al, one having ordinary skill in the art at the time of the invention would have been motivated to utilize any of the facer materials taught by Clayton et al in any combination, wherein it would have been obvious to utilize an aluminum foil as an outer

Application/Control Number: 10/081,133 Page 4

Art Unit: 1773

surface to provide reflective properties, as is well known in the art, or as depicted in one of the examples provided by Clayton et al. Further, though Clayton et al do not specifically teach that the facer laminate includes adhesive layers, it is well established in the art that adhesive layers may be provided between adjacent materials to improve adhesion between the materials and would have been obvious to one skilled in the art at the time of the invention. With respect to the limitations on heating temperature and heating time, though one skilled in the art would have been motivated to determine the optimum heating temperature and time to cure the foam and produce the laminate, the Examiner takes the position that these limitations as instantly claimed are process limitations that do not materially affect the final end product in a manner that would render it patentable over the teachings of Clayton et al.

## Response to Arguments

6. Applicant's arguments with respect to claims 25, 27-29 and 48-60 have been considered but are most in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monique R. Jackson whose telephone number is 571-272-1508. The examiner can normally be reached on Mondays-Thursdays, 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/081,133 Page 5

Art Unit: 1773

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Monique R. Jackson Primary Examiner

Technology Center 1700

September 16, 2005